

POLARIZED LIGHT ILLUMINATION DEVICE

ABSTRACT

The invention relates to a polarized light illumination device comprising in particular:

- a light source (1),
- a Fresnel-Rhomb type optical polarization device (3) receiving the light (10) from the source (1) and reflecting it at least twice on at least two opposite faces (35, 36),
- a reflective polarizer (6) positioned facing the output face (31) of the Fresnel-Rhomb polarization device to receive the reflected light so as to allow the linearly polarized light to pass in a first direction and to reflect the light presenting any other polarization,
- a reflection device (44) positioned between the polarization device (3) and the light source (1) so as to allow the light (10) to pass but to reflect the light returned by the reflective polarizer (6).

The invention is applicable to liquid crystal display for the lighting of liquid crystal valves.

FIGURE FOR THE ABSTRACT: FIGURE 1